UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,755	05/02/2001	William Douglas Poynter	9425	6062

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EXAMINER
HOGAN, MARY C

ART UNIT	PAPER NUMBER
2123	

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/847,755	POYNTER, WILLIAM DOUGLAS
	Examiner	Art Unit	
	Mary C Hogan	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *9/4/01*.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-12* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-12* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *9/4/01* is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This application has been examined.

2.   **Claims 1-12** have been examined and rejected.

Specification

3.   The disclosure is objected to because of the following informalities. Appropriate correction is required.

4.   Page 9, line 2, the reference to the "Save Character" button in Figure 4 should be changed to be element 417.

5.   Page 9, line 3 references the character set design module as element 202 in Figure 2 where it should read element 204.

6.   Page 10, lines 1 and 4, element 510 in Figure 5 is used to reference both the stored message box and the Display Message elements.

Drawings

7.   The drawings are objected to because of the following:

8.   Figure 2 does not have element 200, "Exit Design Tool" as referred to in the specification (page 5, line 9),

9.   Figure 4, "Save Character" and "Perform Frequency Analysis" are both labeled 416.

10.   Figure 5 is missing a label for "Display Message".

11.   Figure 6, the labels 608 and 610 are missing.

12.   Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any

required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Interpretation

13.   **Claim 6** refers to pixel size, spacing between rows of pixels and spacing between columns of pixels. It was concluded that spacing between rows columns of pixels refers to intercharacter and interword spacing and the spacing between rows of text in a document. As to pixel size, it was unclear from the claim language and the specification how this pixel size is determined and changed and whether it refers to the pixel size on a display or when a document is printed. For purposes of examination, pixel size was interpreted to be directed to the number of pixels necessary to display a character, dependent on the font size used.

Claim Rejections - 35 USC § 102

14.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

15.   **Claims 1-4, 10-12** are rejected under 35 U.S.C. 102(a) as being anticipated by NEC Corporation (NEC Corporation, "Character Pattern Editor for On-Screen Display of LSI for Windows", User's Manual, November 2000), herein referred to as **NEC**.

16.   As to **Claim 1**, **NEC** teaches: a dot matrix display design tool, comprising:

a font designer for creating a character set comprising a plurality of characters and a character design associated with each of the characters, the character design comprising a pattern of selected and deselected pixel positions in a matrix of pixel positions, the font designer creating each character design in response to selections made by a user **(Figure 2-6, "Pattern Edit Window", page 24, (4), page 37, 3.2.3 sentence 1)**; the font designer further allowing the user to save and delete characters as desired, **(page 20, "Save" and "Delete" commands, and page 29, steps 3 and 4)**; and

a display designer including a display emulator comprising a text input entry interface for text input by a user **(Figure 2-6, "Image View Window" and "Hex Dump Window", page 32, Figure 3-2**

and description); wherein the hex data can be directly edited by text input by the user, and a character set selection interface to allow user selection of character set for displaying the text **(page 31, Figure 3-1 and description)** where the interface allows the set of characters corresponding to a specific device; the display designer further including a text display to allow display of the input text in a format reflecting the selected character set **(Figure 2-6, "Image View Window")**; the display designer further including a set of editing tools to allow modification of the display in response to selections made by a user **(page 20, Edit Menu and page 21, Palette Menu, pages 34-36, "Editing Palette" and description).**

17.   As to **Claim 2, NEC** teaches: the design tool of claim 1 further comprising a display viewer for emulating a dot matrix display, the display viewer being operative to receive input text and a character set selection, the display viewer being further operative to display the input text in a format reflecting the character set selection, the display viewer being further operative to simulate additional characteristics of a dot matrix display in displaying the input text, the display viewer being further operative to modify the additional characteristics in response to user selections **(Figure 2-6, "Pattern Edit Window", page 24, (4) and Figure 2-8)** .

18.   As to **Claims 3 and 11, NEC** teaches: the design tool of claim 2 wherein the display emulator is a first display emulator and the display designer further comprises a second display emulator, the first and second display emulators allowing the user to simultaneously view first and second text entries and to view results of independent selections and modifications relating to the first and second text entries **(Figure 2-6, "Pattern Edit" and "Image View" windows, page 27, (1)).**

19.   As to **Claim 4, NEC** teaches: the design tool of claim 3 wherein the font designer comprises a dot matrix designer comprising an array of pixel positions to be selected or deselected by the user, the font designer allowing user selection of each of a plurality of characters and allowing the user to select use the dot matrix designer to select or deselect pixel positions to create an array of pixels to be associated with the selected character **(Figure 2-6, "Pattern Edit Window", page 24, (4), page 37, 3.2.3 sentence 1).**

20.   As to **Claim 10, NEC** teaches: a method of display design for a dot matrix display device comprising the steps of:

creating a character set design in response to user selection of each of a set of characters from a character list **(page 31, Figure 3-1 and description)** where the interface allows the set of characters corresponding to a specific device; and specification of pixel values for the character in a matrix designer providing a visual model of an array of available pixel locations for the character **(Figure 2-6, "Pattern Edit Window", page 24, (4));** and

displaying a message using the selected character set design and modifying aspects of the design in response to user selections, the display of the message being immediately altered to reflect each user selection **(page 37, (1))**.

21.   As to **Claim 12, NEC** teaches: the method of claim 11 and further including displaying a representation of a hardware display unit using the character set design and modifying selected features of the representation in response to user selections, each modification being immediately displayed upon entry of a corresponding user selection **(Figure 2-6 and pages 21 and 22, View and Window Menus)**.

Claim Rejections - 35 USC § 103

22.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

23.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.

2.   Ascertaining the differences between the prior art and the claims at issue.

3.   Resolving the level of ordinary skill in the pertinent art.

4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

24.   **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over **NEC** as applied to **Claim 1** above, and further in view of Ballard et al (U.S. Patent Number 6,529,197), herein referred to as **Ballard**.

25.   As to **Claim 5, NEC** teaches: a font designer comprising an array of pixel positions to be selected or deselected by the user, the font designer allowing user selection of each of a plurality of characters and allowing the user to select use the dot matrix designer to select or deselect pixel positions to create an

array of pixels to be associated with the selected character (**Figure 2-6, "Pattern Edit Window", page 24, (4), page 37, 3.2.3 sentence 1**).

26.   **NEC** does not expressly teach: wherein the font designer allows user specification of a character size to be associated with a character set and wherein the font designer sets dimensions of the array of pixel positions according to the character size specified by the user.

27.   **Ballard** teaches user specification of a character size to be associated with a character set and wherein the font designer sets dimensions of the array of pixel positions according to the character size specified by the user so that the geometric description of the font outline is scaled in physical pixel coordinates, altering the height and width of the character, as a method well known in the art for displaying text on pixel-oriented display devices (**column 1, lines 53-62, column 2, lines 34-44**).

28.   It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the font designer as taught in **NEC** to include the user specification of a character size that will scale the physical pixel coordinates or dimensions of the array of pixel positions as taught in **Ballard** since it is well known in the art that font size is commonly requested by a user while using a font display device.

29.   **Claims 6-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over **NEC and Ballard** as applied to **Claim 5** above, and further in view of **Spitz** et al (U.S. Patent Number 5,513,304), herein referred to as **Spitz**.

30.   As to **Claims 6 and 9, NEC and Ballard** teach editing tools (**NEC: page 20, Edit Menu and page 21, Palette Menu, pages 34-36, "Editing Palette" and description**).

31.   **NEC and Ballard** do not expressly teach the editing tools allowing specification of contrast, pixel size, spacing between rows of pixels and spacing between columns of pixels, interword spacing, intercharacter spacing and spacing surrounding punctuation characters.

32.   **Spitz** teaches a method of formatting a text document including dependent on contrast (**column 5, lines 5-6, "image density"**), pixel size (**column 12, lines 56-62** wherein one pixel narrower refers to the pixel size), spacing between rows of pixels and spacing between columns of pixels (**Figure 10**), interword spacing and intercharacter spacing (**column 4, lines 41-42, column 6, lines 34-35**)and spacing surrounding punctuation characters (**column 8, line 59-column 9, line 7**).

33.   It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the editing tools as taught in **NEC and Ballard** to include the specification of contrast, pixel size, spacing between rows and columns of pixels, interword and intercharacter spacing and spacing surrounding punctuation characters as taught in **Spitz** since **NEC and Ballard** and **Spitz** are both directed
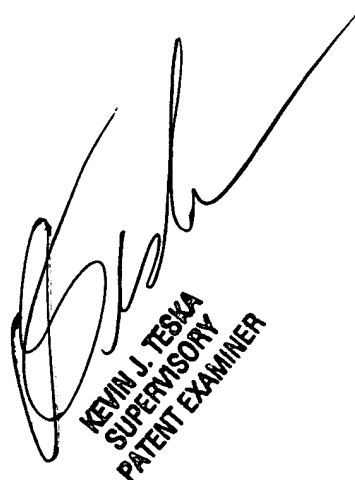
to the display of text and the specification of spacing is important to make the display of text readable to the user such that lines or characters of text to not overlap, making the text unreadable.

34.   As to **Claims 7 and 8, NEC** teaches: the display viewer allows storage of a set of messages (**page 20**, "Save" command) and cycling between the messages by scrolling at a rate selected by the user (**Figures 2-6, 2-8, 2-9**, scroll bars at right side of windows allows scrolling through the messages).

Conclusion

35.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary C Hogan whose telephone number is 703-305-7838 or 571-272-3712 starting mid-October 2004. The examiner can normally be reached on 7:30AM-5PM Monday-Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on 703-305-9704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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